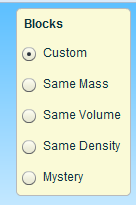
**Density- To Float or Not to Float… That is the Question**

Name\_\_\_Answer Key\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Using the Phet Density simulator calculate the density of the mystery blocks. Remember that Density = Mass/Volume. Calculate the values and include the proper units and round your answers to the hundredths place.

When you load the simulator locate the blocks box in the upper right hand corner of the screen. Click on Mystery to begin.



Gather measurements for each of the blocks and fill in the table below.

|  |  |  |  |
| --- | --- | --- | --- |
| **Block** | **Volume** | **Mass** | **Density** |
| 1. **A** | 3.38L | 65.15Kg | 19.27Kg/L |
| 1. **B** | 1.00L | 0.64Kg | 0.64Kg/L |
| 1. **C** | 5.83L | 4.08Kg | 0.70Kg/L |
| 1. **D** | 3.38L | 3.10Kg | 0.92Kg/L |
| 1. **E** | 1.00L | 3.53Kg | 3.53Kg/L |

Click on the show table button and use your measurements to determine what each block is made of.

1. Block A is made of Gold
2. Block B is made of Apple
3. Block C is made of Gasoline
4. Block D is made of Ice
5. Block E is made of Diamond